A NEW SPECIES OF *ANOMALA* SAMOUELLE FROM CALIFORNIA SAND DUNES

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Careful observations by Dave Carlson and Paul Ritcher at Oregon State University revealed a second species in a series of *Leptohoplia testaceipennis* Saylor. Examination of additional material revealed that nearly every series of *Leptohoplia* contained this mimetic taxon in rather large numbers. Further examination indicates that 2 genera are involved, *Leptohoplia* and a new species of *Anomala*, described below. The differences between these 2 genera have been recently discussed by Potts (1974; Pan-Pacific Entomol. 50:148-154).

I would like to thank R. W. L. Potts, Coarsegold, California for his comments upon the relationships involved; F. G. Andrews, California Department of Food and Agriculture; and R. Schuster, University of California at Davis for the Scanning Electron microscope photographs. I would like to thank H. F. Howden (HFH), D. Marqua, R. Westcott, P. O. Ritcher (OSU), R. W. L. Potts, S. Frommer (UCR), F. Hovore, and F. G. Andrews (CDA) for the loan of specimens.

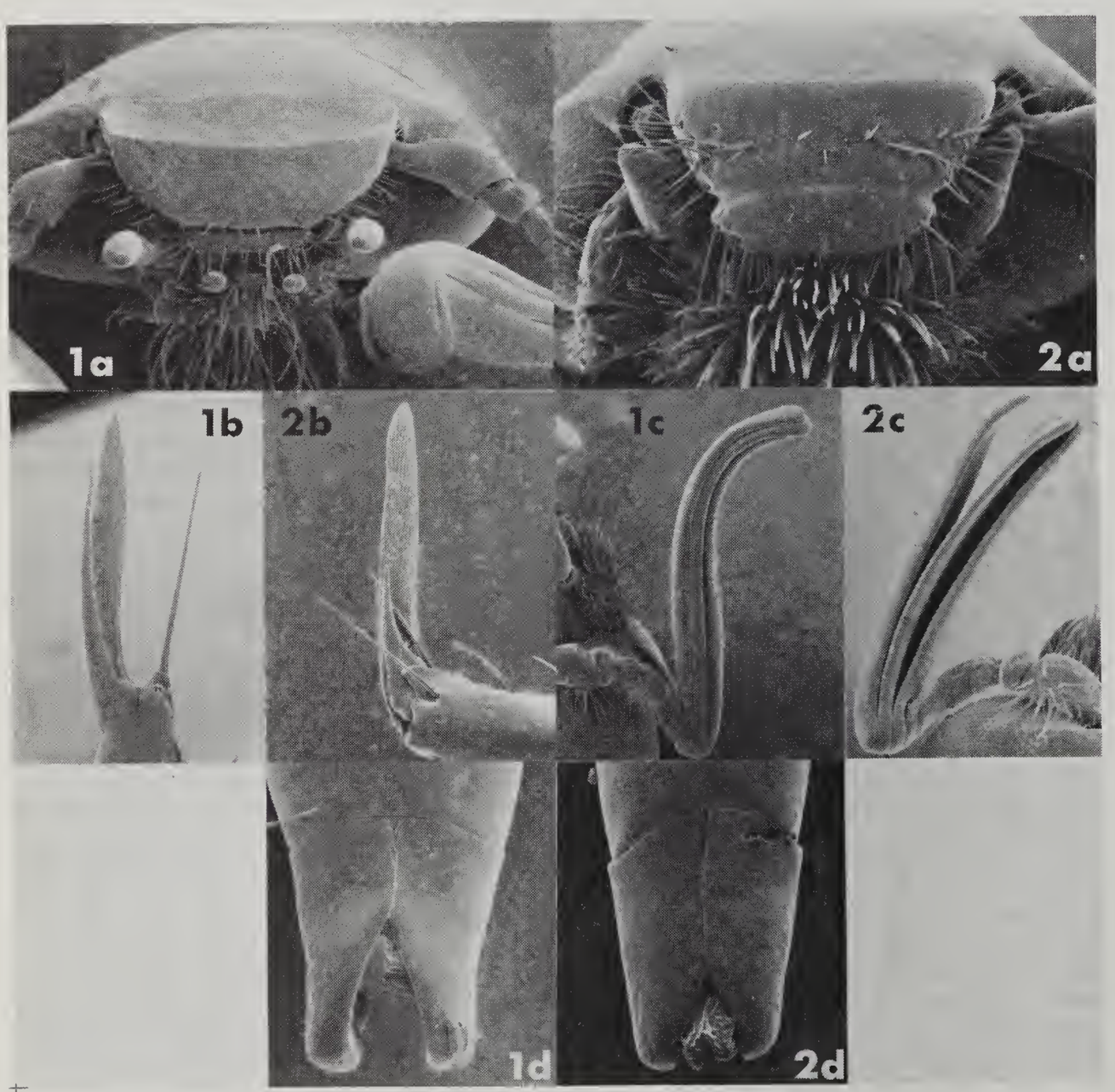
Anomala carlsoni Hardy, **new species**

Holotype male. Length 7.6 mm, width of prothorax 2.7 mm. Head dorsally pale red-brown, eyes black, posterior tarsi and tibial apices pale red-brown, rest of body straw yellow. Clypeus concave, parallel sided; anterior clypeal face produced, visible from above; clypeal width greater than length (3:2 ratio). Dorsal surface glabrous except for few fine, erect hairs at inner margin of eyes; clypeus at front very finely punctate with scattered punctures. Antennae 9-segmented, club 3-segmented, over twice length of basal segments (Fig. 1c). Eyes large, globose. Labrum anteriorly produced; distinctly separated from clypeus by deep groove. Labium tumid, provided with numerous long erect hairs. Mentum narrow, globose, palps inserted medially, at tip. Prothoracic length ca. 0.7 times width. Prothorax provided with scattered fine punctures. Semi-erect pale hair mainly confined to posterior or lateral parts of pronotum, posterior and lateral edges with reflexed marginal bead. Posterior thoracic angles broadly rounded, anterior angles obtuse. Scutellum nearly glabrous, rounded posteriorly. Elytra with lateral posterior 2/3 with row of numerous hairs just inside membranous border; intervals plane; striae present only as single row of fine punctures, some punctures each provided with short, fine, erect hair. Pygidium margined posteriorly; long hairs on disc, becoming denser apically. Ventral surfaces with scattered recumbent to erect, short to long, pale hairs. Six visible abdominal sternites. Anterior tibia bidentate; larger anterior and medial claw cleft. Posterior tibia with 2 incomplete carinae ventrally. Posterior tibial apex with short to long spines; corbel prominent. Posterior claws unequal, smaller over 1/2 length of larger (Fig. 1b).

Allotype female. Length 7.04 mm, width of prothorax 2.45 mm. Differs from Holotype as follows: Eyes smaller, not globose; head and prothorax more coarsely punctured; antennal club small, no longer than basal segments. Ventral surfaces more densely clotted with fine, pale erect hair. Anterior tarsal claw small, reduced; width of posterior tibial apex 1/2 tibial length. More globose in overall appearance.

Paratypes. Length 5 mm to 8.5 mm, width of prothorax 1.8 mm to 3 mm. Agree well with type. Male genitalia, fig. 1d.

Type material: Holotype, Allotype, and 811 male Paratypes. Holotype (CAS# 12427) and 3 male paratypes; California, Imperial Co., 2 mi. NW Glamis, II-27-1972 (ARH). Allotype (CAS) and 200 male paratypes; California, Imperial Co., 3 mi. NW Glamis, IV-9-1972 (ARH). Six hundred eight other male paratypes: CALIFORNIA, *Imperial Co.*, Glamis; V-5-1970 (5 ARH, HFH); IV-12-1969 (1 ARH); IV-16-1972 (3, Hovore); III-26-1972 (7, Marqua); IV-23-70 (1, ARH); 1 mi. W. Glamis, IV-7-1971 (4, Westcott, OSU); 2 mi. W. Glamis, V-2/4-1973 (259, OSU); 3 mi. NW Glamis, IX-16-1972 (4, ARH); III-4-1972 (23, ARH); III-24-1972 (97, ARH) IV-7/9-1972 (196, Potts); 3.5 mi. NW Glamis, III-10-1972 (6, CDA); 10.7 mi. W Glamis (1, UCR). ARIZONA, *Yuma Co.*, Yuma, IV-3-1954 (1, HFH). Specimens additionally will be deposited in USNM and LACM.



Figs. 1 (*Anomala carlsoni*) and 2 (*Leptohoplia testaceipennis*): a, Clypeal face, showing free (1a) or fused (2a) labrum; b, Posterior tarsal claws; c, Antennae, showing ratio of basal segments to club length; d, Male genitalia.

In most Anomaline the mentum is broad anteriorly, with the palps inserted on the outer apical angles. In *A. carlsoni* the mentum is quite narrow and globose, with the palps inserted close together at the apex. *Leptohoplia* also has a mentum that is narrower than that typical for most Anomalini, but not as narrow as the mentum of *A. carlsoni.* A similar demonstration of the narrow mentum may be seen in some species in the "*Rhombonalia*" section of the genus, where this species probably should be placed, although it lacks the cleft tarsal claw.

This species appears to be easily recognized among North American *Anomala.* The small size, parallel-sided shape, and pale coloration make it distinctive. It is most likely to be confused with *Leptohoplia testaceipennis*, a sympatric species of similar size, shape, and coloration. It is distinguished from *Leptohoplia* by the free labrum (Fig. 1a), longer posterior tarsal claw (Fig. 1b), and the approximate ratios of the basal segments of the antennae to the club (Figs. 1d, 2d).

EDITORIAL: ADMISSIONS AND ACKNOWLEDGMENTS

In this first year as editor of the *Bulletin,* I have made some strides toward learning the job, but not without making many errors of mechanics, judgement, and timing. One thing I have learned is just how time-eating the job is; my intention originally was to stick it out for 5 years, but now I do indeed believe I would be pleased to surrender my post should someone express a sincere interest!

With the vigorous cooperation of the Storter Printing folks, we are making a crash effort to produce this issue on time, to be in the mail by the end of the year. Hence, this issue is unusually small, and some articles promised for this issue must wait til March. I can promise an extra large issue then, in compensation.

I am extremely indebted to Bob Woodruff for continuing to serve as "Acting Managing Editor", helping with numerous details best accomplished in Gainesville. I also am pleased to acknowledge Paul Shubeck for providing all of the literature notices that appeared in 1976.

One of the most arduous and thankless tasks in preparing manuscripts for printing is the good, critical outside review. For their excellent services, I heartily thank George Ball, Wayne Clark, Art Cushman, John Doyen, Mike Druckenbrod, Ginter Ekis, Terry Erwin, Bob Gordon, Tom Hlavac, Dan Janzen, John Kingsolver, John Lawrence, Paul Spangler, Ted Spilman, Chris Thompson, George Vogt, and Dick White.

To these and all other contributors, thanks.

—D. R. Whitehead